

Remarks/Arguments:

Claims 1-8 are the subject of the recited Office Action, due to two previous restriction requirements. In the cited Office Action, the Examiner objected to the term "field effect transmitter" in claim 8, which is herein amended as suggested by the Examiner to correct that typographical error. The Office Action further rejects claims 1-2 and 6-8 as anticipated under 35 USC 102(a) or (e) in view of Sugiyama (US Pat. No. 6,774,390) or Dakshina-Murthy (US Pat. No. 6,803,631) or Clark (US Pat. No. 6,635,909); and rejects claim 3 as anticipated by Sugiyami. Finally, the Office Action rejects claims 4-5 as obvious under 35 USC 103(a) as obvious over the combination of Sugiyama in view of ordinary skill in the art (Kripovak 6,765,303 cited as ordinary skill against claim 4).

In response to the above rejections, Applicant hereby submits a Rule 131 affidavit by each inventor and Exhibits A through H that form part of those affidavits. Supplementary to those affidavits and those exhibits, the undersigned attests that the invention report (of which Exhibit G forms a part) was submitted to outside counsel by letter dated March 21, 2003 for the purposes of drafting a new patent application, and that the undersigned corresponded with the inventors during each of April, May, June, and July 2003 in drafting and refining the present application, which was filed on July 21, 2003.

A reference may be shown as failing to qualify as prior art under 35 U.S.C. § 102(e) by antedating the effective date of the reference. See M.P.E.P. §§ 706.02(b) and 2136.05. A prior art patent may be sworn behind under 37 CFR § 1.131 by a showing of facts sufficient to establish a completion of the invention in this country before the filing date of the application on which the U.S. patent issued. "The showing of facts shall be such, in character and weight, as to establish ... conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application." 37 CFR § 1.131(b).

The "invention" refers to the subject matter of the claims. The purpose of the Rule 131 showing is to broadly establish possession of the invention. A Rule 131 declarant need not necessarily show possession of the entire invention as later claimed; it is sufficient that he

shows possession of enough to make the entire invention obvious to one of ordinary skill in the art. See In re Spiller, 500 F.2d 1170, 1176, 182 USPQ 614, 618-19 (CCPA 1974).

The attached affidavits and supporting documentation show conception at least as early as September 20, 2001 (Exhibit C). That conception date precedes each of Clark (Mar. 19, 2002), Dakshina-Murthy (Jan 23, 2003), and Sugiyama (Feb 21, 2003). Diligent reduction to practice is shown through Exhibits D through H through the time the application was sent to outside counsel for the purposes of preparing a patent application (March 21, 2003). Exhibit D, dated Aug. 9, 2002, indicates a continued attempt to schedule a testing facility, indicating that previous efforts by inventor Joshi to secure facilities for testing embodiments of the invention spanned some time prior to the date of Exhibit D.

“[I]t is not necessary that the inventor be working on the invention every day. The question of diligence is considered in light of all the circumstances. For example, people may be sick or even take vacations (thereby creating gaps in activity) while still being diligent. ... The question is whether they were pursuing their goal in a reasonable fashion.” Hybritech, Inc. v. Abbott Laboratories, 4 USPQ2d 1001, 1006 (C.D. Calif. 1987). *aff’d* 7 USPQ2d 1191 (Fed. Cir. 1988). Inventor Joshi’s three weeks vacation during December 2003 therefore constitutes excusable delay.

“[D]ecisions (as to the order in which a patent attorney prepares cases) recognize that the pressure of other business on a patent attorney may be a sufficient excuse for delay in filing provided the attorney takes up work in a reasonable order...” *Chisum on Patents*, vol 3, ch. 10.07[4][e] (Matthew Bender & Co., Inc., Rel. 82-3/02). See also, Gould v. Schawlow, 150 USPQ 634 (CCPA 1966); Rines v. Morgan, 116 USPQ 145, 148 (CCPA 1957) (“it is not necessary that an inventor or his attorney should drop all other work and concentrate on the particular invention involved; and if the attorney has a reasonable backlog of work which he takes up in chronological order and carries out expeditiously, that is sufficient.”). The undersigned attorney personally attests that he had a reasonable backlog of patent cases that he took up in a reasonable and chronological order during the entire period from March through July 2003. The reasonable and chronological order, still practiced by that drafting attorney, is that cases bearing a bar date (for filing or response to office action) are given precedence over all other cases in order to preserve the proprietary rights of clients in their

inventions. The undersigned attorney confirmed in June 2003 that no bar date applied to the present invention. Thus, diligence is shown for the period from March 21 to July 21, 2003.

In light of the above and the attached affidavit and exhibits, the Applicant contends that claims 1-8 are patentable as the cited art is not valid against them.

Claims 36-50 are added by this amendment, of which claims 36 and 43 are independent claims. Support for claims 36 and 43 is within Figures 8B, 8D, and 8E and the related description. Gates not coupled directly to one another electrically excludes embodiments such as those shown in Figs. 8C-8E.

New claims 37-40 are supported by Fig. 8E and related text; claims 41, 43 and 44-45 are supported by Fig. 8B and related text; claim 42 (and claim 41 from which it depends) is supported by Fig. 8D and related text; claims 43 and 46 are supported by Fig. 8F and related text; and claim 47 is supported by a combination of Figs. 8E and 8F. Claims 48-49 draw support from page 15, lines 18-29.

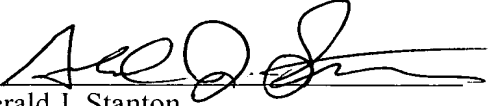
Arguing below only in the event that the cited prior art is held to be valid against the present application, and respecting the added claims, none of the cited references are seen to disclose that a gate may be disposed, partially or fully, within the substrate that supports the channel. Further, none of the cited references are seen to disclose that two gates, disposed on opposite sides of the channel, are not coupled to one another directly but instead disclose only that a third gate couples the opposed two gates directly. Further, no reference is seen to provide motivation to dispense with their top gate, which aids in controlling the channel. The Applicant recognized an advantage of such an arrangement at the time of the application, as detailed at page 15, lines 18-29. That advantage is realized where the two gates are not coupled electrically to one another directly. The Applicant hereby stipulates that the gate oxide layer does not effect a direct electrical coupling between otherwise spaced-apart gates.

For the above reasons, the now-pending claims as amended and added herein are seen to be both novel and non-obvious over the references, alone or in combination. The Applicant requests the Examiner withdraw the rejections and pass the pending claims to issue. The

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Reply to Office Action of November 8, 2004

undersigned representative welcomes the opportunity to resolve any remaining issues via
teleconference for those matters the Examiner deems appropriate.

Respectfully submitted:



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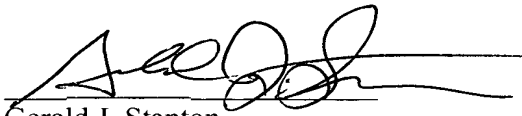
March 8, 2005
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March 8, 2005
Date



Gerald J. Stanton